

DELIVERY REPORT

For the

South Carolina LiDAR Acquisition (Beaufort County)

Prepared for:
South Carolina Department of Natural Resources

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Report Date: January 13, 2014



Beaufort County –Deliverables Overview Checklist

- ☒ **Raw Point Cloud Data**
 - ☒ LAS version 1.2
 - ☒ Georeferenced
 - ☒ GPS Times are included
 - ☒ Intensity values are included
 - ☒ Full swaths
 - ☒ 1 file per swath

- ☒ **Classified Point Cloud Data**
 - ☒ LAS Version 1.2
 - ☒ Correct Georeference Information
 - ☒ Contains GPS Times
 - ☒ Contains Intensity Values
 - ☒ Tiled to 5,000 ft x 5,000 ft Tile Grid
 - ☒ Classified with class 1 –Unclassified, class 2 – Bare-Earth Ground, 7 – Noise, 8-Model Key Points, 9 – Water, 10 – Ignored Ground, 11-Overlap, 13 – Bridges and large Box Culverts

- ☒ **Bare Earth Surface w/ Breaklines (Raster DEM)**
 - ☒ Cell size of 5 ft
 - ☒ ESRI GRID File format
 - ☒ Georeferenced
 - ☒ Four blocks with overlap between blocks
 - ☒ Reviewed for edge-matching and artifacts
 - ☒ Free of void areas
 - ☒ Hydrographic features have been enforced according to SOW

- ☒ **Bare Earth Terrain Model**
 - ☒ File GDB format
 - ☒ Created with Masspoints LiDAR data (Classes 2 and 8) and project boundary

- ☒ **Hydro Enforced Terrain Model**
 - ☒ File GDB format
 - ☒ Created with Masspoints LiDAR data (Classes 2 and 8), hydro breaklines, and project boundary

- ☒ **Ancillary Data**
 - ☒ Tile grid in Shapefile format derived from the LiDAR Deliverable
 - ☒ Project Boundary delivered as shapefile
 - ☒ Tile grid, 5000 ft x 5000 ft, and in Shapefile format

- ☒ **Breakline Data**
 - ☒ 3D Breakline Data for Ponds and Lakes, Streams and Rivers (Dual Line), Single Line Drains, Tidal Waters, Stream Connectors, Stream Centerlines, and Edge of Roads in GDB format

- ☒ **Intensity Imagery**
 - ☒ Intensity imagery in GeoTIFF format and 2ft pixel size, tiled 5000 ft x 5000 ft

- ☒ **Contours**
 - ☒ 1ft contours in GDB format (divided into 4 sets)

- ☒ **Metadata**
 - ☒ FGDC Compliant metadata for:
 - ☒ Deliverables (LAS, Raster DEM, Bare Earth Terrain, All Breaklines, Edge of Roads, Intensity Imagery, Contours, and Project)



Project Reports

- ☒ Collection Report detailing mission planning, flight logs, acquisition, and calibration
- ☒ Control Points used by Acquisition Partner are listed
- ☒ Processing report
- ☒ QA/QC Reports

Raw Point Cloud Data

Raw Point Cloud Data has been included as part of this delivery. The Raw Point Cloud Data is delivered in LAS v1.2. There are 328 swaths covering the project area.

Classified Point Cloud

Classified point cloud data has been delivered tiled to 5000 ft x 5000 ft tiles and named according to tile grid provided by the State. The delivery consists of 981 LiDAR tiles. The tiles have been delivered in LAS v1.2.

Bare Earth Surface w/ Breaklines (Raster DEM)

A total of 4 bare earth raster DEMs in ESRI GRID format have been delivered for this project. All have a cell size of 5 ft and have been reviewed to ensure that they meet the project required specifications. There is a slight overlap between blocks to ensure full coverage.

Terrains (Bare Earth and Hydro Enforced)

Bare Earth Terrain created with final LiDAR masspoints soft clipped to project boundary.
Hydro Enforced Terrain created with final LiDAR masspoints and hydro breaklines soft clipped to the project boundary.

Ancillary Data

Three ESRI shapefiles are included with this delivery. One shapefile is the boundary of the project area. The second shapefile is the project tile grid, provided by the State. The third shapefile is derived from the extents of the actual LAS deliverable to ensure that all delivered LiDAR for this project has been accounted for. The extents have been verified against the project boundary to ensure that there is full coverage for the project.

Breakline Data

3D breaklines identifying ponds and lakes, tidal waters, single line drains, streams and rivers, stream connectors, and edge of roads have been delivered in an ESRI file geodatabase. 2D polylines representing stream centerlines are also included. All breaklines and polygons were derived to meet the project specifications as outlined in the SOW.

Intensity Imagery

Intensity imagery is delivered tiled to 5000 ft x 5000 ft tiles that are named according to the final tile grid provided by the State. The imagery is in GeoTIFF format with 2 ft pixel size. The intensity imagery is created from the full point cloud LiDAR data. The final delivery consists of 981 GeoTIFF tiles.

Contour data

Contours will be delivered separately from this delivery. The contours will be delivered in a file geodatabase. The contours will be 1-foot intervals and coded as intermediate or index (every 5th interval). Contours will be verified to cover the full project area and will be created according to project specifications.



Metadata

Project level metadata for each of the deliverables has been delivered in XML format. Metadata has been reviewed through the USGS metaparser tool to ensure that it is FGDC compliant.

Project Report

A comprehensive project report has been delivered in PDF format. This report includes the LiDAR acquisition and processing information along with detailed information on the production and quality control processes used for the development of all deliverables.

Other Comments

Data for the South Carolina Beaufort County LiDAR Project data is delivered on a 1 TB LACIE hard drive, S/N: 190301732.